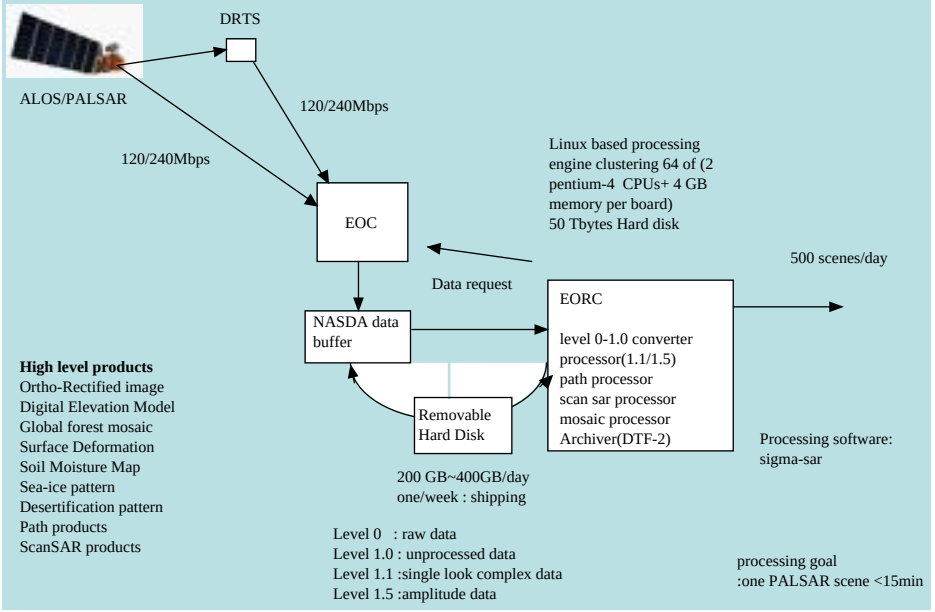
PALSAR Processing @ EORC

Masanobu Shimada

Earth Observation Research Center, National Space Development Agency of Japan, Harumi 1-8-10, Harumi island triton square office tower X 22, Chuo-Ku, Tokyo-To, Japan, 104-6023, Voice 81-3-6221-9071, Fax: 81-3-6221-9192, shimada@eorc.nasda.go.jp

Kyoto meeting @ Jena Oct. 2002



A Configuration of EORC processing system

Path Product (Intermediate product)

Calibrated, unsigned short integer (16 bit), amplitude of sigma-zero

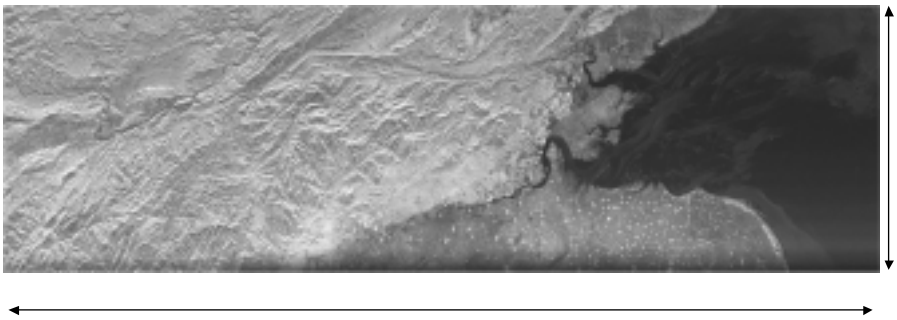


Image length is not limited while PRF is same

JERS-1 SAR (South East Asia)

Global Forest Mapping Project

Path number:43-75
Obs. Dates:March 30 1996 - June 15 1996

Mosaic image from the Mosaic processor

EORC processor : performance and goal (for PALSAR)

Daily input from EOC : 400 GB or 500 scenes (28 HH or 14 HH+HV)[1)]

a)Main product distributing to forest community: 1.5 path products

Daily process : -> 5 nodes out of 64 process 500 scenes.

-> 2 nodes for raw data conversion-> 1.0 and data copy of path->DLT

b)Mosaic data : amplitude data mosaic

c)SLC data: under consideration for distribution to forest researchers. Problem is data volume, not processing time.

Performance: one PALSAR 1.5 image < 15 minutes (per node) (28HH/14 HH+HV)

->96 scenes/node/24 hours

[1)]One raw data (28 HH or 14 HH+HV) needs 900 MB

EORC processor contains 64 nodes.

1.5 path image for forest : calibrated slant range 16 bit image averaged over TBD(64?) pixels for speckle reduction + ancillary data for image location.

EORC processor is enough capable for forest community!